



US006750556B2

(12) **United States Patent**  
Sodemann et al.

(10) **Patent No.:** US 6,750,556 B2  
(45) **Date of Patent:** Jun. 15, 2004

(54) **REMOVABLE FUEL TANK**  
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(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 71 days.

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(21) Appl. No.: **10/106,433**  
(22) Filed: **Mar. 26, 2002**  
(65) **Prior Publication Data**  
US 2003/0184094 A1 Oct. 2, 2003

(57) **ABSTRACT**

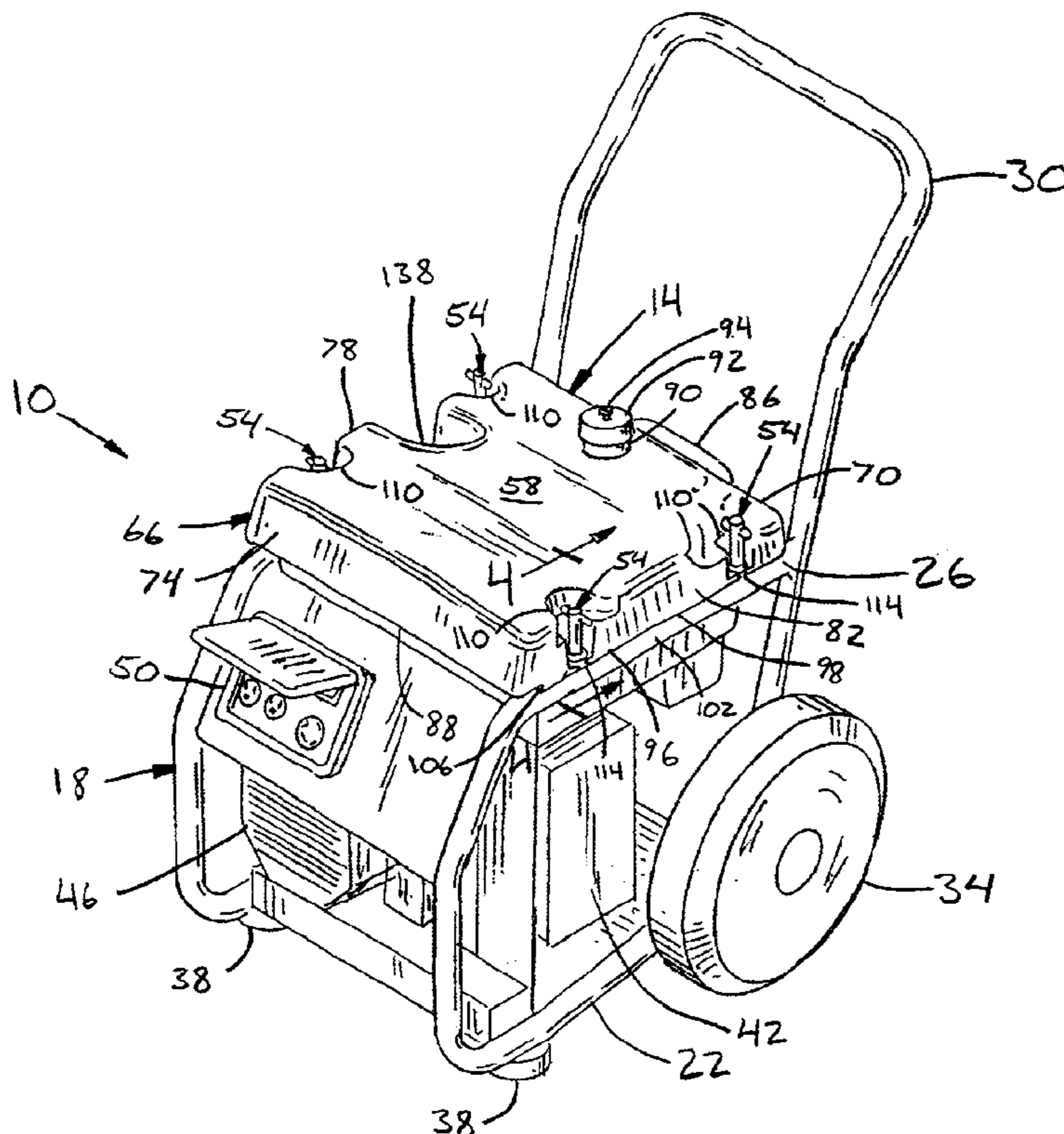
(51) **Int. Cl.**<sup>7</sup> ..... **H02K 5/00**  
(52) **U.S. Cl.** ..... **290/1 A; 322/1; 123/3**  
(58) **Field of Search** ..... **290/1 A, 2, 40 R; 322/1; 123/2, 3**

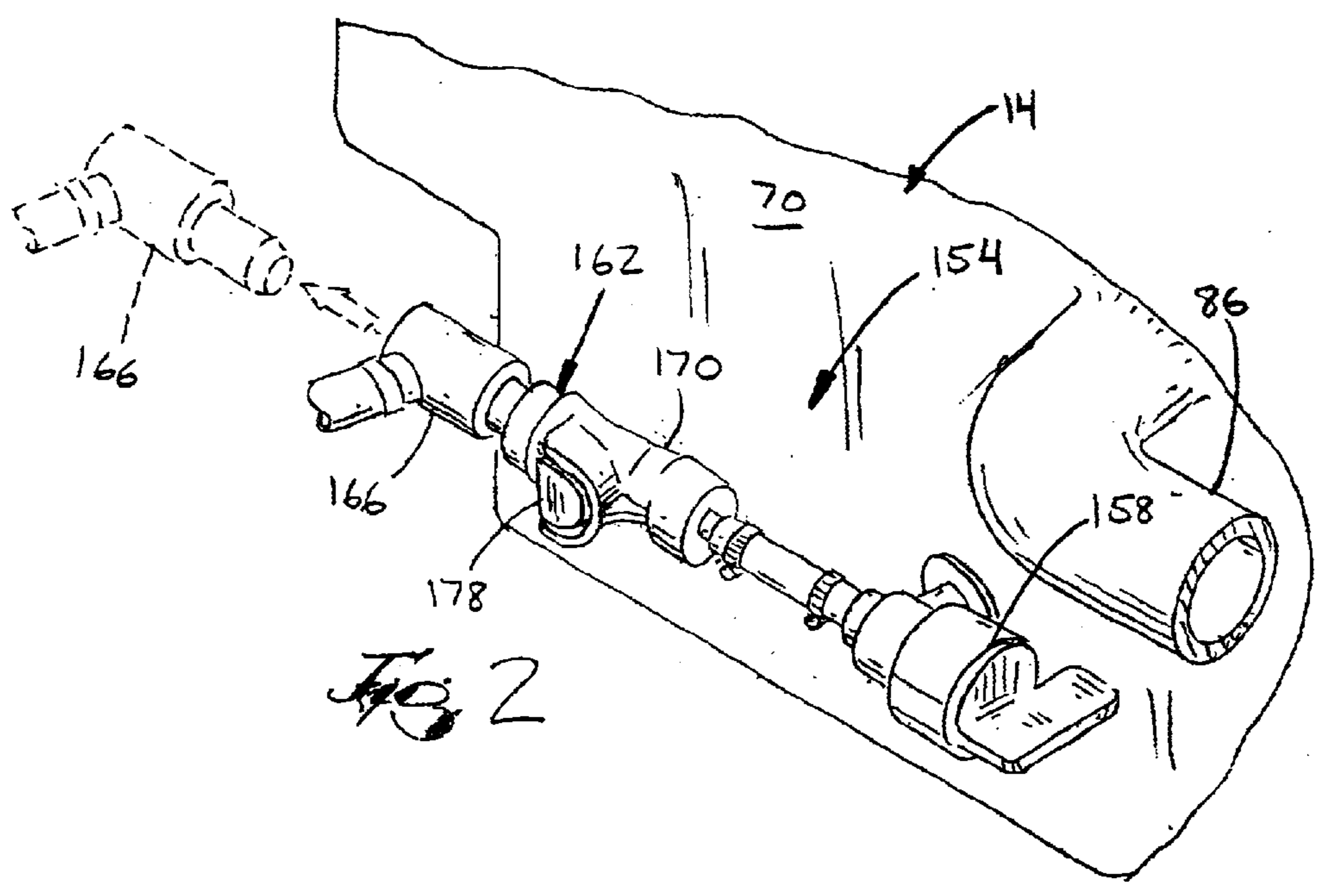
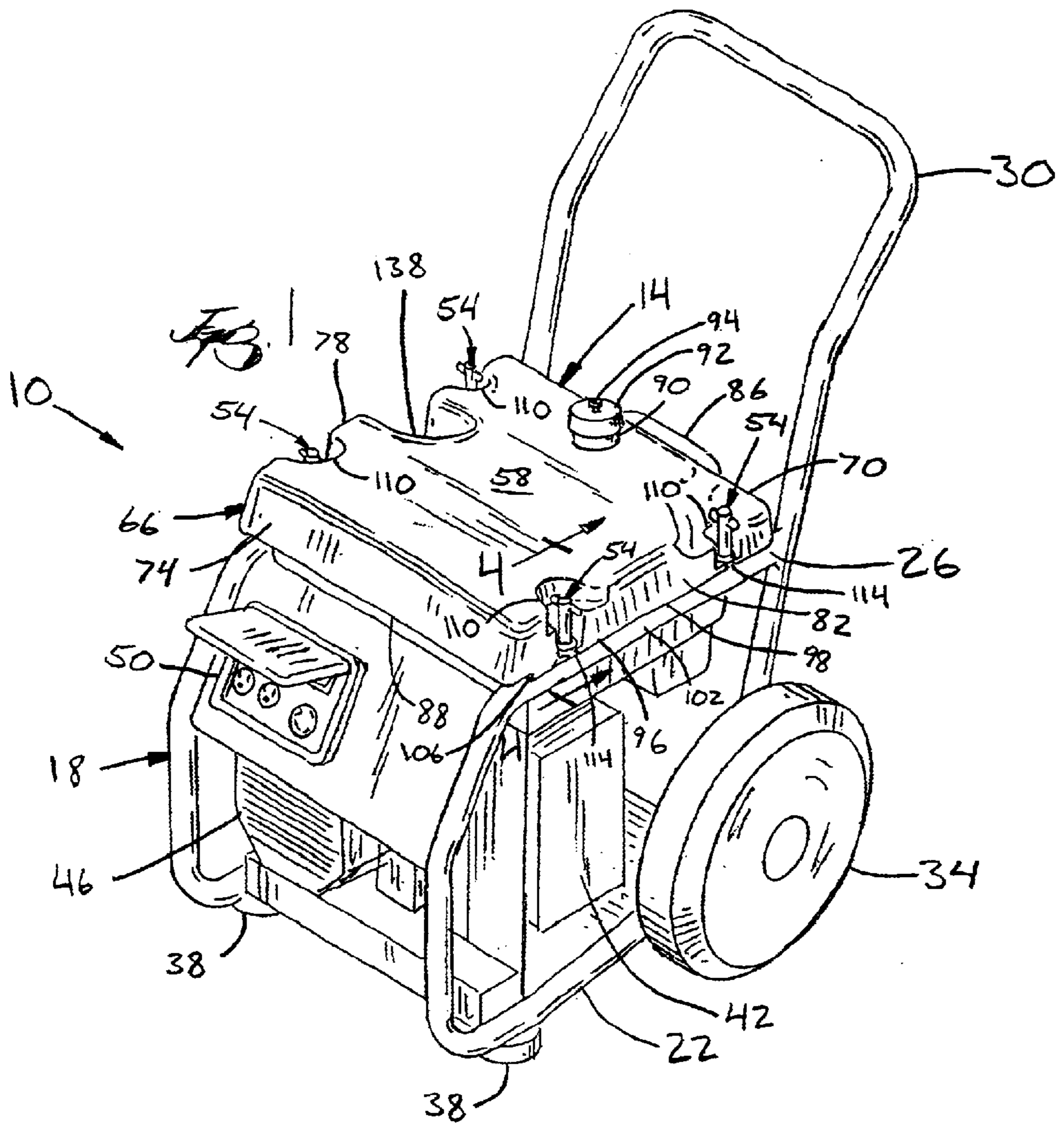
A generator embodying the invention comprises a removable fuel tank that is easily accessible, and may be easily removed from the generator. The generator includes a frame that supports an engine and the fuel tank. The fuel tank is removably interconnected to the frame with at least one quick release fastener. The quick release fastener may include a bolt, a pivoting tab, a clamp, or other similar quick release fasteners. Preferably, the quick release fastener may be engaged by hand, and does not require additional tooling. A fuel line between the fuel tank and the engine includes a quick disconnect attachment that prevents fuel flow and easily detaches the fuel tank from the engine. The fuel tank may be removed from the frame, taken to a gasoline station for refilling, and reattached to the generator for operation.

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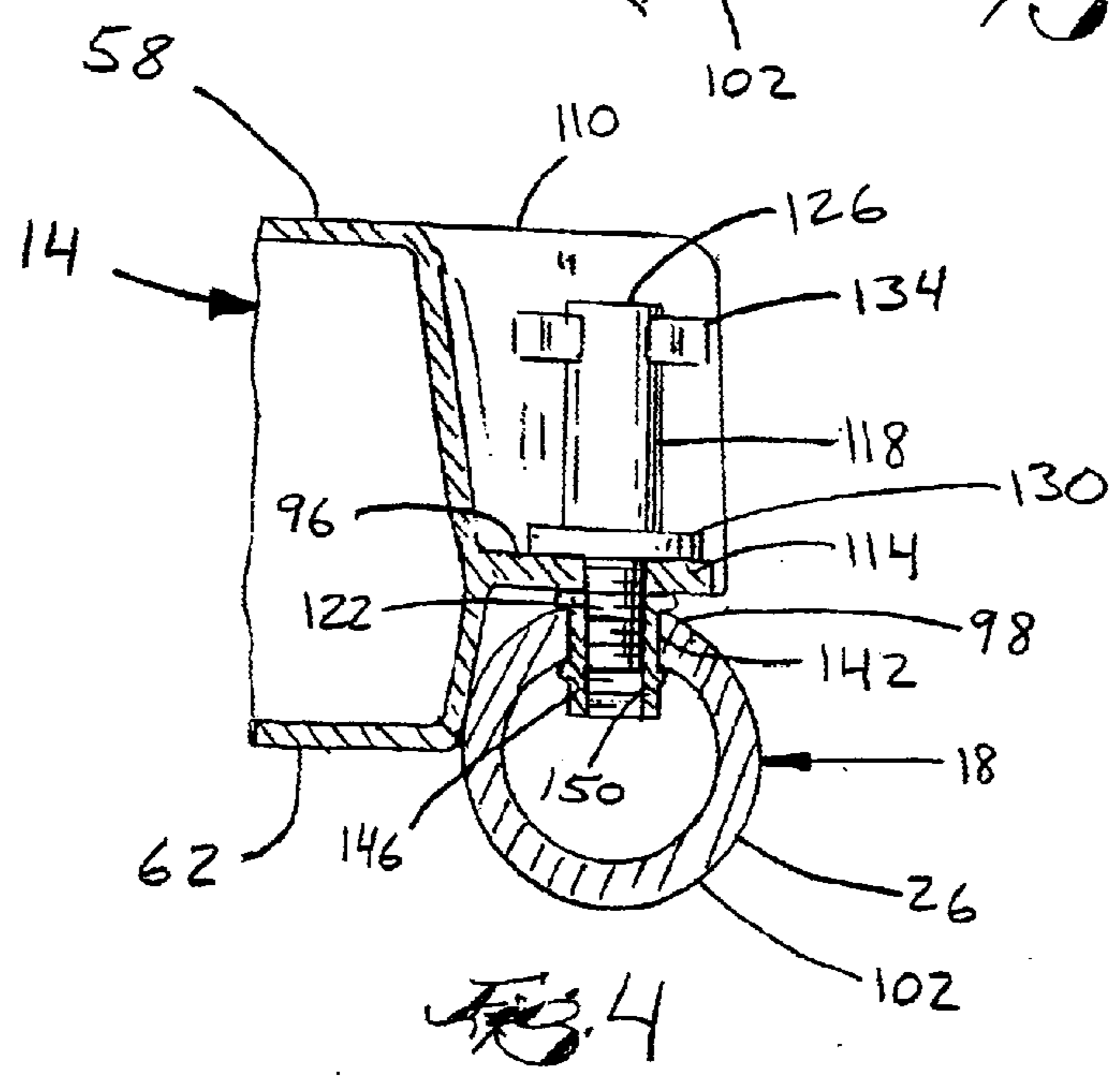
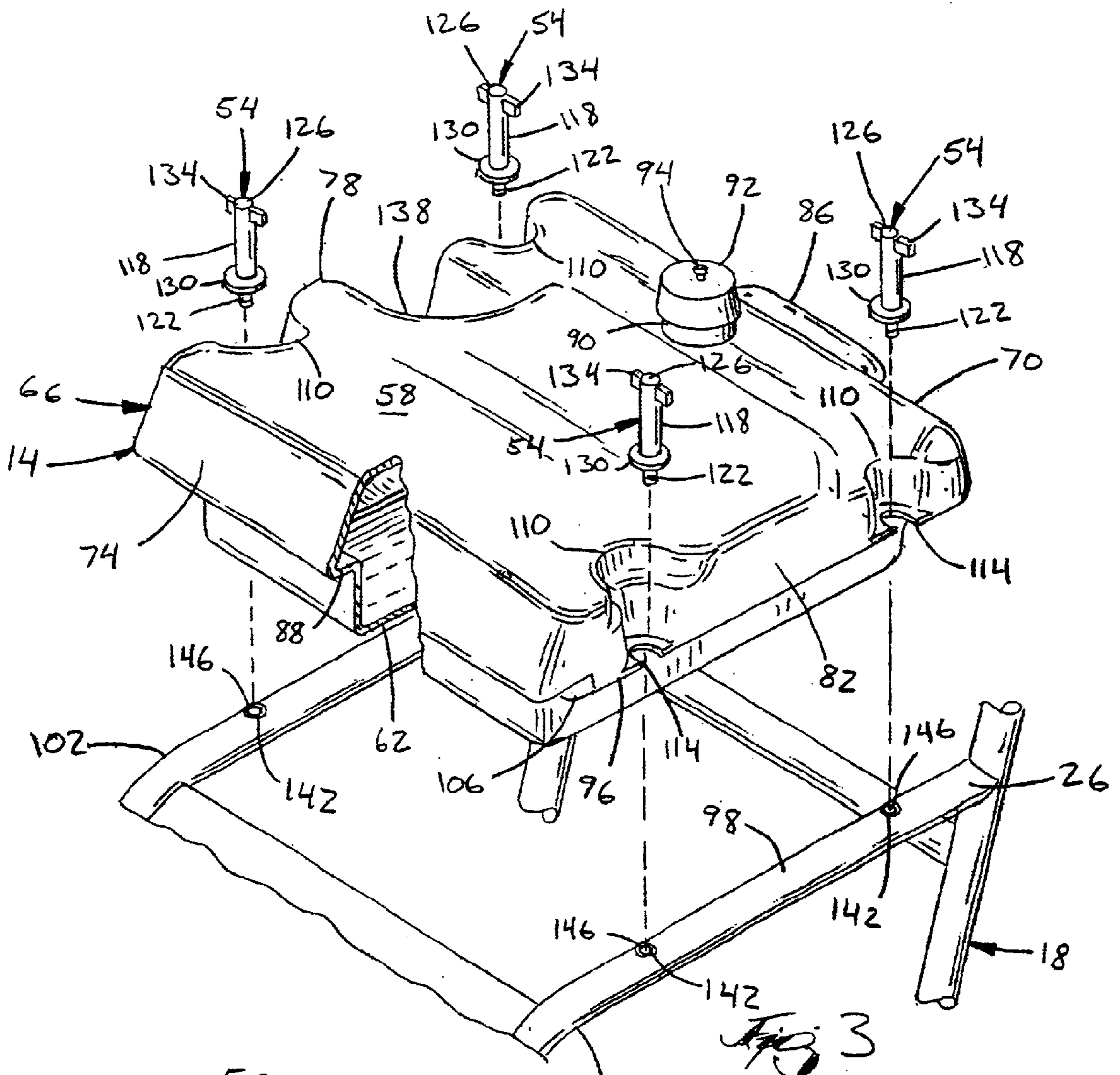
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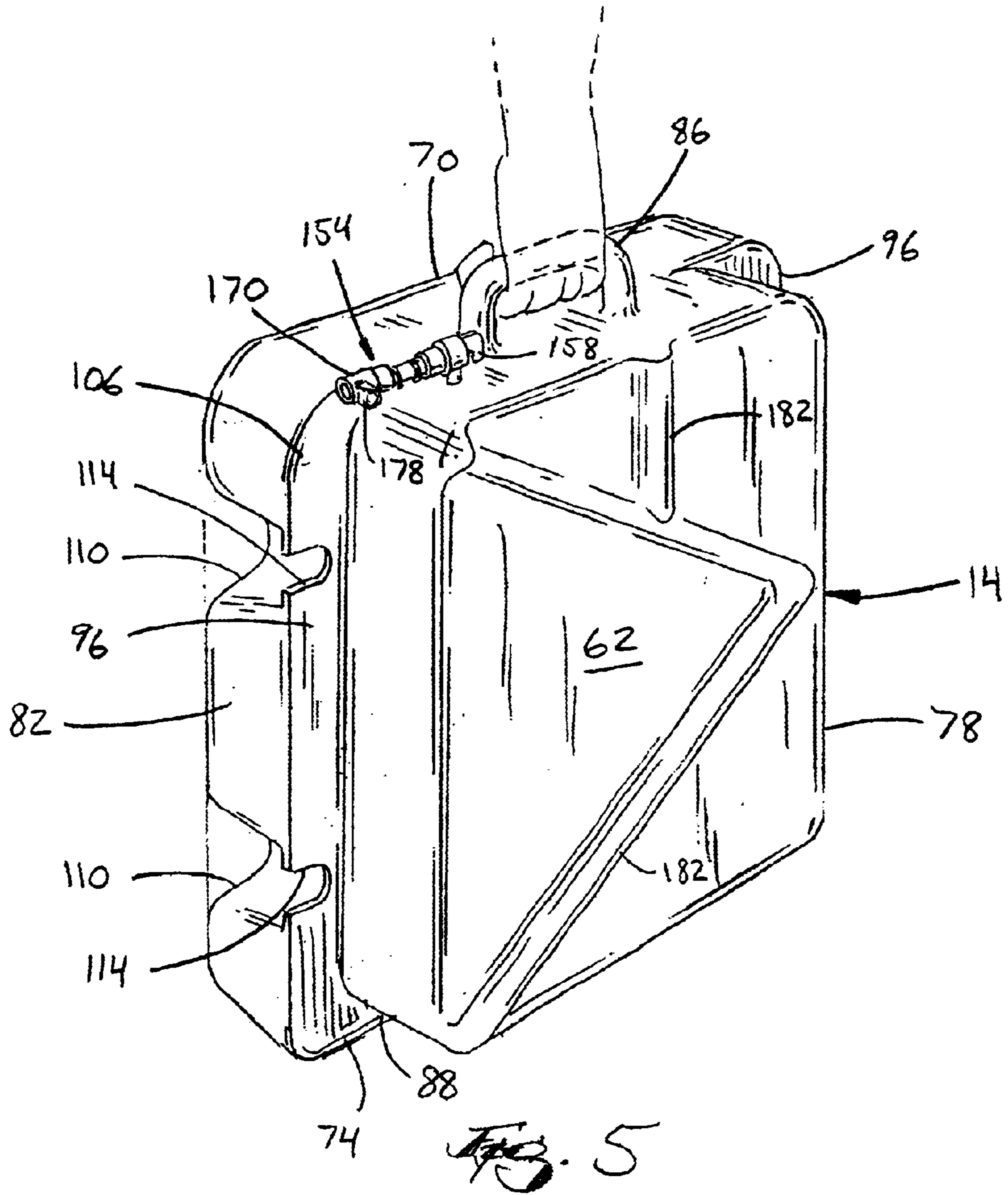
**19 Claims, 4 Drawing Sheets**

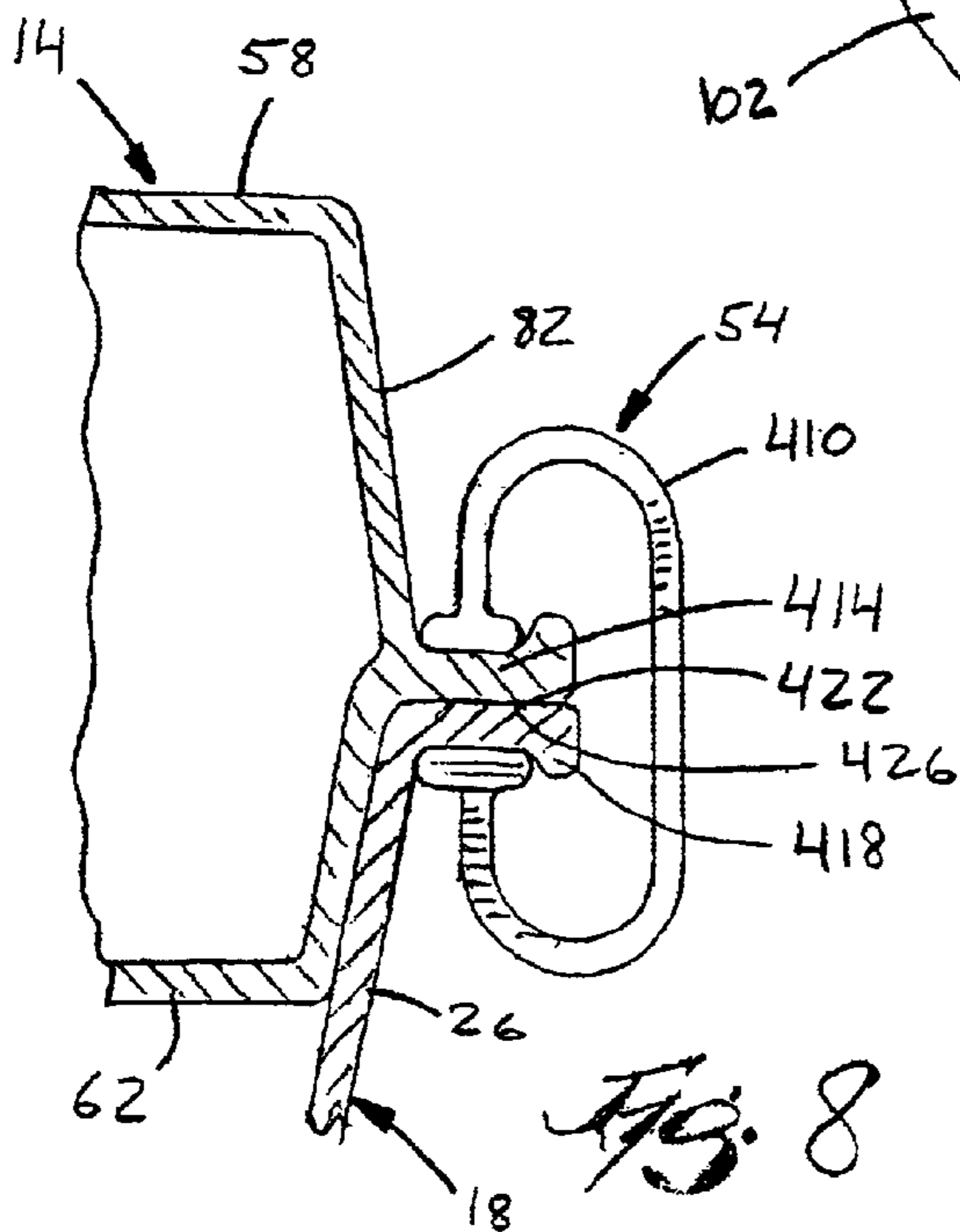
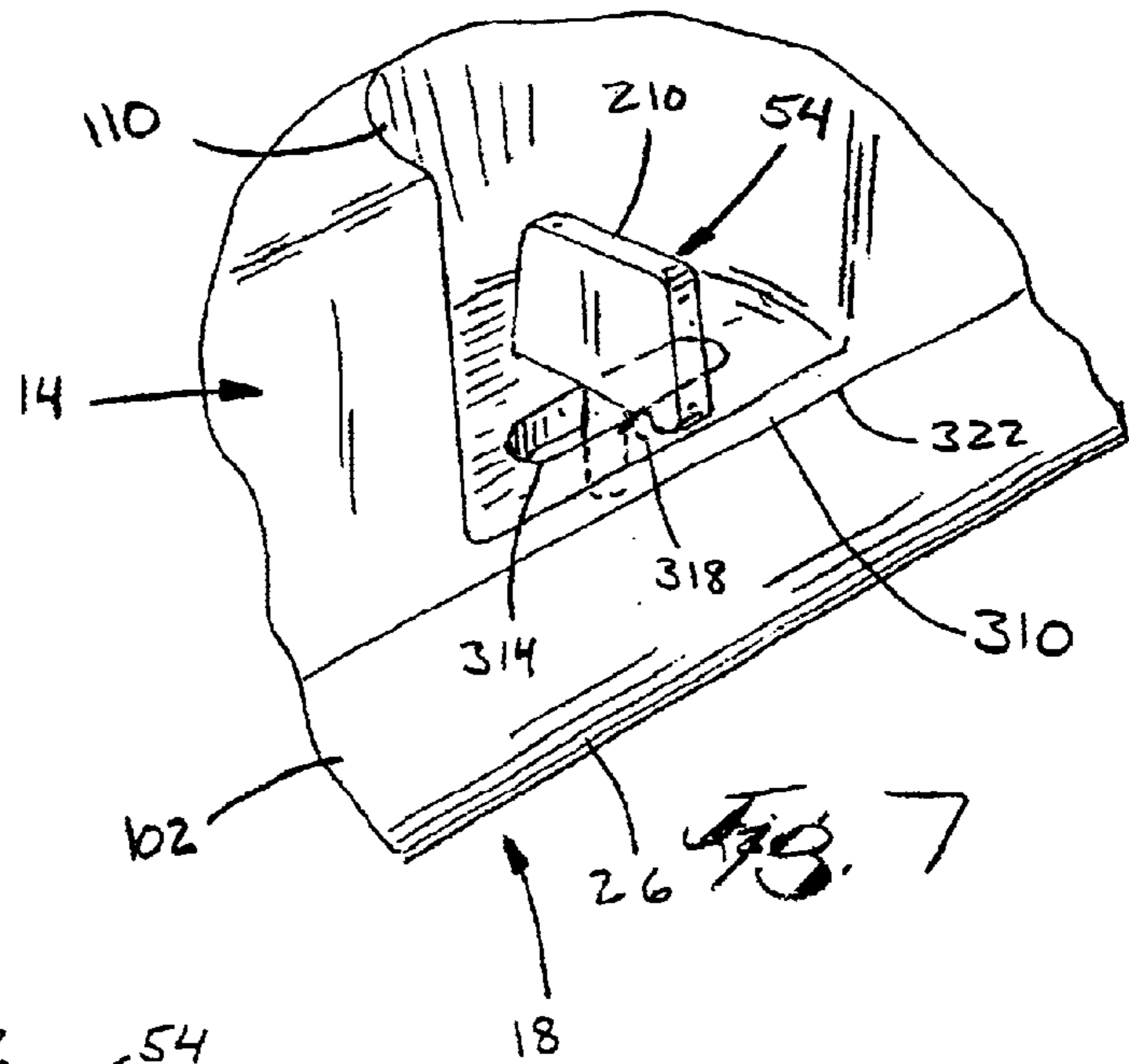
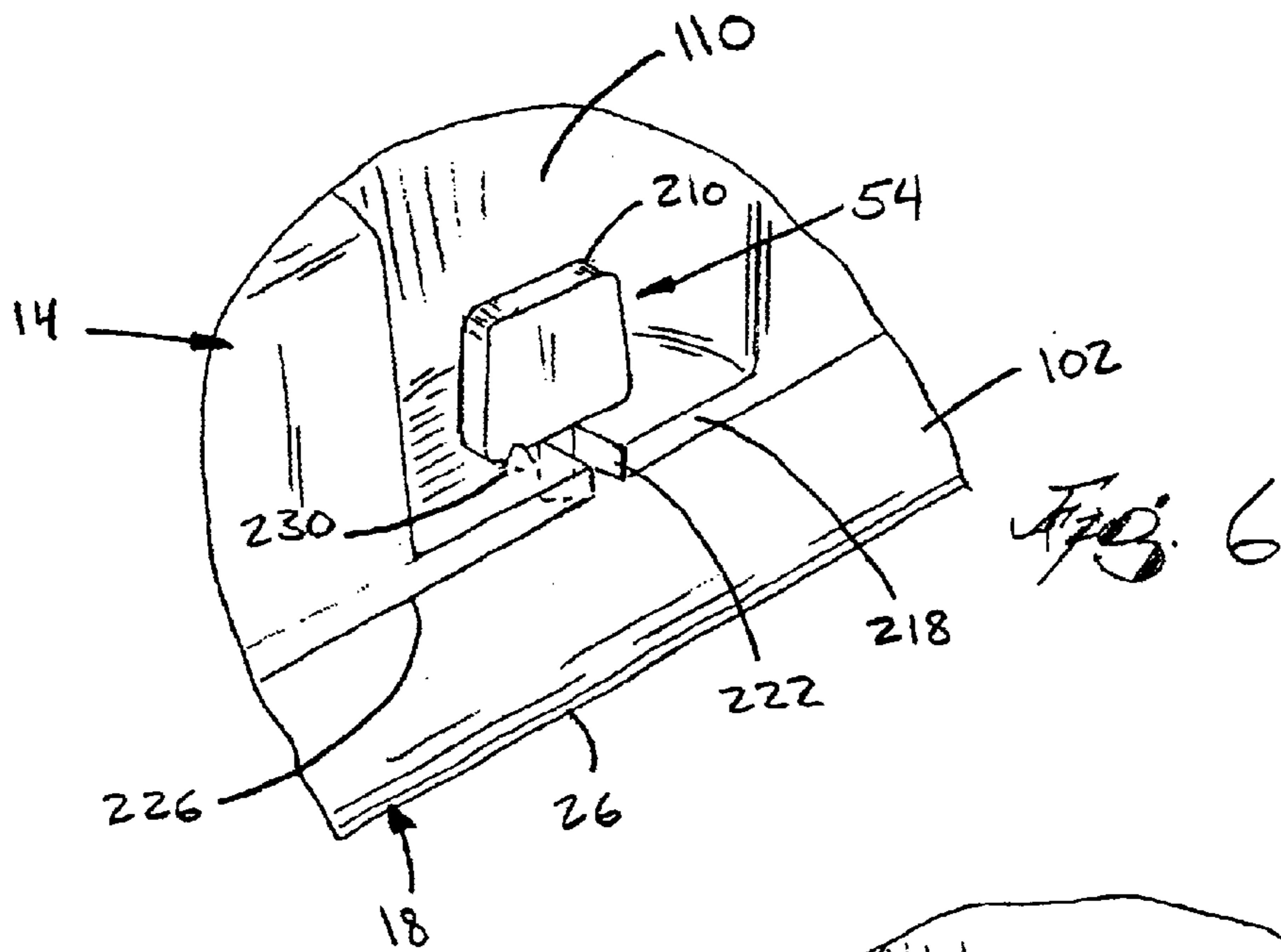














**REMOVABLE FUEL TANK****FIELD OF THE INVENTION**

This invention relates to engine-driven electrical generators, and more particularly to a fuel tank for such generators.

**BACKGROUND OF THE INVENTION**

Electrical generators are commonly used to provide electrical power in situations where conventional wired electrical power grid sources are not available, such as during a power outage, at construction sites, or at remote locations. The generator may use an engine to drive the generator. The generator may include a fuel tank to store gasoline and provide fuel for the engine. Some prior art generators include fuel tanks that are mounted to the generator.

When refilling the fuel tank, the operator may take the entire generator to a gasoline station, or a separate gasoline container may be used to transport fuel to the generator. Generators are typically heavy and cumbersome, and transporting the entire generator for a refill is typically not practical. Separate gasoline containers are additional items for an operator to obtain and have available when a refill is necessary. Separate gasoline containers may be easily misplaced and may require additional storage space.

Also, the operator may have to maintain each separate gasoline container full of gasoline. It may be desirable for an operator to have a reserve supply of gasoline stored in separate gasoline containers for extended use of the generator. In this situation, the operator may have to make a first trip to the gasoline station with separate gasoline containers to obtain gasoline for filling the generator fuel tank, and a second trip to refill the separate gasoline containers to maintain a reserve supply of gasoline.

Some separate gasoline containers may have a capacity that is less than the capacity of the generator fuel tank. For example, some generator fuel tanks have a capacity of 5 gallons, and may have a capacity of 10 gallons or more. A typical separate gasoline container may have a capacity of 2.5 gallons. Therefore, multiple gasoline containers or multiple trips to a gasoline station may be needed to refill the generator.

Also, generators are often needed during power outages. Separate gasoline containers may become relatively scarce during a power outage when demand for backup power increases. A shortage of gasoline containers during a power outage may require an operator to have multiple containers or make multiple trips to a gasoline station to maintain a supply of fuel for the generator. The separate gasoline containers also requires extra storage space, and may not be readily available when needed.

**SUMMARY OF THE INVENTION**

A generator embodying the invention comprises a removable fuel tank that is easily accessible and may be easily removed from the generator. The exposed, easily accessible, removable fuel tank provides a convenience for the operator because the removable fuel tank may be taken to a gasoline station for refilling, and reattached to the generator for operation. The removable fuel tank is readily available and is less likely to be lost than a separate gasoline container. Additionally, the removable fuel tank does not require additional storage space when not in use.

The generator includes a frame that supports an engine and the fuel tank. The engine powers the generator, and the

fuel tank stores gasoline for the engine. The fuel tank is removably interconnected to the frame with quick release fasteners. The quick release fasteners may retain the fuel tank to the frame, and may hold the fuel tank and frame from substantially moving with respect to each other. Preferably, the quick release fasteners may be disengaged by hand without the use of additional tooling. A fuel line between the fuel tank and the engine may include a quick disconnect attachment that may shut off fuel flow and easily detach the fuel tank from the engine.

In the preferred embodiment, the quick release fastener includes a threaded fastener, such as bolt or screw, and may include a handle to facilitate engaging or disengaging the fastener by hand. The fuel tank may include a clamping portion, and the bolt may extend through a slot in the clamping portion and engage the frame. The bolt may include a disc-shaped flange that clamps the clamping portion to the frame. Alternatively, the quick release fastener may include other fasteners, such as clamps, pivoting tabs, key locks, elastic members, pins, latches, or other similar fasteners. Preferably, the quick release fasteners may be engaged by hand, and do not require a tool.

The fuel tank may be openly exposed near the top of the generator to provide easy access when refilling the fuel tank, and when detaching or reattaching the fuel tank. The fuel tank is preferably not enclosed within a housing. The fuel tank is readily available, and the operator does not have to locate a separate gasoline container when the generator requires refueling. The entire removable fuel tank may be refilled without the need for multiple gasoline containers or multiple trips to the gasoline station.

Additionally, it may be desirable to maintain a reserve fuel supply for operating the generator for extended periods of time. The operator may make a single trip to the gasoline station to refill the removable fuel tank and separate gasoline containers. With some prior art generators, separate trips to the gasoline station with separate gasoline containers were needed to first obtain gasoline for refilling the generator, and then refill the separate gasoline containers again for a reserve supply of gasoline. With the removable fuel tank, an operator may refill the generator, and refill separate gasoline containers for a reserve fuel supply in a single trip to the gasoline station. Therefore, the removable fuel tank may be particularly useful for initial filling of the fuel tank, and may help an operator to maximize a reserve gasoline supply while minimizing trips to the gasoline station.

**BRIEF DESCRIPTION OF THE DRAWINGS**

FIG. 1 is a perspective view of a generator having a removable fuel tank, according to the present invention.

FIG. 2 is an enlarged view of a quick-disconnect fuel line on the generator of FIG. 1.

FIG. 3 is an exploded view of the fuel tank on the generator of FIG. 1.

FIG. 4 is a cross sectional view taken along line 4—4 of FIG. 1.

FIG. 5 is a perspective view of the fuel tank removed from the generator of FIG. 1.

FIG. 6 is an alternate embodiment of a quick release fastener for retaining the fuel tank to the generator.

FIG. 7 is an alternate embodiment of a quick release fastener for retaining the fuel tank to the generator.

FIG. 8 is an alternate embodiment of a quick release fastener for retaining the fuel tank to the generator.

Before the embodiments of the invention are explained in detail, it is to be understood that the invention is not limited



in its application to the details of construction and the arrangements of components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced or of being carried out in various ways. Also, it is to be understood that the phraseology and terminology used herein is for the purpose of description and should not be regarded as limiting.

Although references are made below to directions, such as left, right, up, down, top, bottom, front, rear, back etc., in describing the drawings, they are made relative to the drawings (as normally viewed) for convenience. These directions are not intended to be taken literally or limit the present invention in any form.

#### DETAILED DESCRIPTION

FIG. 1 illustrates a portable generator **10** having a removable fuel tank **14**. The generator **10** includes a frame **18** having a base **22**, a support portion **26** disposed above the base **22**, and a frame handle **30** projecting outwardly from the frame **18**. The frame handle **30** may be movable to reduce the height of the generator **10** for storage or transport. Wheels **34** are interconnected to the frame **18** near the base **22** to facilitate transporting the generator **10**. Stops **38** are also connected to the frame **18** near the base **22** to help provide stability while the generator **10** is stationary. FIG. 1 illustrates a portable generator **10** having wheels **34**, but the removable fuel tank **14** may also be used with a stationary generator. The removable fuel tank **14** may be beneficial for a stationary generator since the entire stationary generator cannot be transported to refill the fuel tank **14**.

An engine **42** is connected to the frame **18** and supported by the base **22**. The engine **42** is generally disposed between the base **22** and the support portion **26**. In the illustrated embodiment, the engine **42** is an approximately 10 HP engine, and the fuel tank **14** stores fuel for the engine **42**. The fuel tank **14** is disposed above engine **42**, and is openly exposed near the top of the generator **10** to provide easy access to the fuel tank **14**. The generator **10** includes a gen-set **46** that generally convert mechanical power from the engine **42** into electrical current. The gen-set **46** may provide AC or DC current, and may include, among other things, a rotor, stator, or alternator.

As shown in FIG. 1, the generator **10** includes a control panel **50**, having several electrical outlets. Various tools or appliances may be plugged into the control panel **50**, and the generator **10** may provide power for the tools or appliances. In the preferred embodiment, the generator **10** provides an AC current of 105–125 Volts (V), 50–60 Hertz (Hz), and 20 Amps (A) through a conventional outlet in the control panel **50**. Alternatively, the generator **10** may include a 120V–15A outlet, a 120V–30A locking type outlet, a 120/240V–20A locking type outlet, a 120/240V–30A locking type outlet, a 12VDC current outlet, or other similar outlets known to one skilled in the art.

The fuel tank **14** is removably interconnected to the frame **18** near the support portion **26**. A quick release fastener **54** retains the fuel tank **14** to the frame **18**. In the illustrated embodiment, the fuel tank **14** may have a capacity of approximately 5 gallons or more. The fuel tank **14** may be formed from a plastic material, or another similar substantially rigid material that is resistant to gasoline. The fuel tank **14** has a first face **58** that is substantially rectangular, a second face **62**, and a wall **66** extending between the first face **58** and the second face **62**. The first face **58** faces away from the engine **42**, and the second face **62** faces toward the engine **42**.

The wall **66** has a first end **70** and a second end **74** disposed opposite one another. The wall **66** also includes a first side **78** and a second side **82** disposed opposite one another, and adjacent the first end **70** and second end **74**. In the illustrated embodiment, the first end **70** is located near the frame handle **30**, and includes a C-shaped tank handle **86**. The second end **74** is disposed opposite the first end **70** near the control panel **50**, and includes a ridge **88** that extends inwardly from the second end **74**. The tank handle **86** and ridge **88** facilitate carrying the fuel tank **14** when the fuel tank **14** is removed from the frame **18**.

The fuel tank **14** includes a fuel opening **90** for refilling the fuel tank **14**. In FIG. 1, the fuel opening **90** is located in the first face **58** near the top of the generator **10**. The first face **58** and the fuel opening **90** are exposed near the top of the generator **10** to make the fuel opening **90** easily accessible. A fuel cap **92** may detachably engage the fuel opening **90** to enclose the fuel opening **90**. In the illustrated embodiment, the fuel cap **92** may be threaded on and off of the fuel opening **90**. The fuel cap **92** may include a vent **94** to release pressure within the fuel tank **14**. Vapors within the fuel tank **14** may expand when the fuel tank **14** is sealed, and actuating the vent **94** to release pressure may help prevent removing the fuel cap **92** while the contents of the fuel tank **14** are under pressure.

The fuel tank **14** includes a clamping portion **96**, and the frame **18** includes a retaining surface **98**. In the illustrated embodiment, the support portion **26** includes elongated rods **102**, and the retaining surface **98** is located near the top of the elongated rods **102**. The clamping portion **96** is located adjacent the sides **78**, **82** of the fuel tank **14**. The retaining surface **98** is adjacent the clamping portion **96** when the fuel tank **14** is interconnected to the frame **18**, and the retaining surface **98** may contact the clamping portion **96**. The clamping portion **96** may be incorporated into an edge **106** extending along the sides **78**, **82** of the fuel tank **14**, and the fuel tank **14** may extend outwardly beyond the elongated rods **102**. The quick release fastener **54** holds the retaining surface **98** and clamping portion **96** from substantially moving with respect to each other.

The fuel tank **14** may include a recess **110** in the sides **78**, **82** that extends inwardly toward the fuel tank **14**. As shown in FIG. 1, two recesses **110** extend into each side **78**, **82**. The clamping portion **96** may be at least partially disposed within the recess **110**. A slot **114** extends into the clamping portion **96** within the recess **110**. The quick release fastener **54** extends through the slot **114** and engages the frame **18** to retain the fuel tank **14** to the frame **18**.

FIG. 3 illustrates the fuel tank **14** removed from the frame **18**. In the illustrated embodiment, the quick release fasteners **54** are bolts **118** having a threaded end **122** and a head **126** opposite the threaded end **122**. A disc-shaped flange **130** projects radially outwardly from the bolt **118** adjacent the threaded end **122**. The head **126** includes a wing handle **134** to facilitate tightening and loosening the bolt **118** by hand. In FIG. 3, the fuel tank **14** includes four bolts **118**, one for each recess **110**. The recesses **110** provide clearance to rotate and thread the bolts **118** into position, and reduce the overall height of the fuel tank frame assembly. The recesses **110** and bolts **118** are preferably located near the corners of the fuel tank **14** to evenly distribute support for the fuel tank **14**. In the illustrated embodiment, the fuel tank **14** also includes an indentation **138** in the first side **78** between the other recesses **110**. The indentation **138** may provide access to the engine **42** for maintenance purposes, such as checking and refilling oil in the engine **42**.

The bolts **118** threadedly engage the support portion **26** to retain the fuel tank **14** to the frame **18**. As shown in FIG. 3,



the support portion 26 includes elongated rods 102, and the retaining surface 98 is disposed near the top of the elongated rods 102. In the illustrated embodiment, apertures 142 extend into the elongated rods 102. The apertures 142 are aligned with the slots 114, and the bolts 118 extend through the slots 114 and into the apertures 142. In FIG. 4, inserts 146 are disposed within the apertures 142, and have a threaded inner surface 150. The threaded end 122 of the bolt 118 engages the inner surface 150 of the insert 146. An air gun having a threaded attachment that engages the insert's threads is used to form flanges on the inserts 146. Alternatively, the threaded end 122 of the bolt 118 may directly engage the support portion 26.

The wing handle 134 permits the bolt 118 to be easily threaded in or out of the apertures 142. Preferably, the bolt 118 may be threaded by hand, and no additional tools are needed to insert or remove the bolt 118. As shown in FIG. 4, the clamping portion 96 is clamped between the disc flange 130 and the elongated rod 102 when the bolt 118 is tightened. The bolt 118 retains the fuel tank 14 to the frame 18, and holds the retaining surface 98 and clamping portion 96 from substantially moving with respect to each other.

As shown in FIG. 3 and mentioned above, the fuel tank 14 includes the ridge 88 near the first end 70 and the tank handle 86 near the second end 74. The ridge 88 and tank handle 86 provide surfaces for an operator to grip while removing the fuel tank 14 from the frame 18. The fuel tank 14 may be removed from the frame 18 after the quick release fasteners 54 are disengaged.

In FIG. 2, a fuel line 154 is connected to the fuel tank 14 and carries fuel from the fuel tank 14 to the engine 42 (FIG. 1). The fuel line 154 may include a shut-off valve 158 and a quick disconnect 162. The shut-off valve 158 may be actuated to stop fuel flow. Once the fuel flow is stopped, the quick disconnect 162 may be disengaged to disconnect the fuel line 154, and the fuel tank 14 may be removed from the frame 18.

In the illustrated embodiment, the quick disconnect 162 includes a plug 166 that may be inserted into a receptacle 170. The receptacle 170 may include a biased clamp 178 that clamps the plug 166 in an engaged position. The plug 166 may include an O-ring or gasket to help seal the fuel line 154. The biased clamp 178 may be actuated against the bias to unclamp the plug 166. Once the plug 166 is unclamped, the plug 166 may be detached from the receptacle 170 and moved to a disengaged position. In FIG. 2, the solid lines illustrate the plug 166 in the engaged position, and the broken lines illustrate the plug 166 in the disengaged position.

The fuel tank 14 may be removed from the frame 18 when the quick release fasteners 54 are disengaged, the shut-off valve 158 stops fuel flow, and the quick disconnect 162 of the fuel line 154 is disconnected. As mentioned above and illustrated in FIG. 3, the tank handles 86 and ridge 88 facilitate lifting the fuel tank 14 and removing the fuel tank 14 from the frame 18.

FIG. 5 illustrates an operator holding the tank handle 86 and carrying the fuel tank 14. FIG. 5 also illustrates the second face 62 having a rib 182 integrally formed with the fuel tank 14. As mentioned above, the fuel tank 14 may be formed from a plastic material, and the rib 182 may help provide strength and stability for the fuel tank 14. In the illustrated embodiment, the rib 182 projects outwardly from the fuel tank 14 and extends in a V-shape along the second face 62. The rib 182 may also extend from the V-shape towards the tank handle 86 along the second face 62 for additional stability. FIG. 5 also illustrates the shut-off valve 158 and receptacle 170 of the fuel line 154 interconnected to the second end 74 of the fuel tank 14.

Since the fuel tank 14 is removable, the fuel tank 14 may be transported separately from the generator 10. In some prior art generators, a separate gasoline container may be needed to transport fuel from a gas station to the generator and refill the fuel tank. With this prior art arrangement, gasoline is transferred from the gas pump at the gasoline station to the separate gasoline container, and then transferred from the separate gasoline container to the generator. Each transfer or pour between containers provides an additional risk of spilling the gasoline. The separate gasoline container also requires extra storage space, and may not be readily available when needed.

As shown in FIGS. 1, 3 and 4, the quick release fastener 54 includes the bolt 118. Other embodiments of the quick release fastener 54 may also be used to retain the fuel tank 14 to the frame 18. As shown in FIG. 6, the quick release fastener 54 includes a relatively flat tab 210 that retains the fuel tank 14 to the frame 18. The tab 210 is pivotally connected to the frame 18 and projects outwardly from the support portion 26. The tab 210 is connected to the support portion 26, and may pivot with respect to the frame 18 to engage or disengage the fuel tank 14. The fuel tank 14 includes at least one recess 110 that extends inwardly toward the fuel tank 14. A clamping portion 218 is at least partially disposed within the recess 110, and a slot 222 extends into the clamping portion 218 within the recess 110. The recess 110 and tab 210 shown in FIG. 6 may be located on the generator 10 (FIG. 1) similarly to the location of the recesses 110 and quick release fasteners 54 shown in FIGS. 1 and 3.

In FIG. 6, when connecting the fuel tank 14 to the frame 18, the fuel tank 14 is positioned above the support portion 26 such that the slots 222 are aligned with the tabs 210. The tabs 210 are pivoted to extend in the same direction as the slots 222. The fuel tank 14 is placed on the support portion 26 and the tabs 210 extend through the slots 222. The tabs 210 are in a disengaged position when the tabs 210 are aligned with the slots 222, and the tabs 210 extend in the same direction as the slots 222. The clamping portion 218 may contact a retaining surface 226 on the support portion 26. Once the tabs 210 extend through the slots 222, the tabs 210 may be pivoted 90 degrees from the disengaged position to an engaged position to clamp the clamping portion 218 to the support portion 26 and retain the fuel tank 14 to the frame 18. FIG. 6 illustrates the tab 210 in the engaged position.

The clamping portion 218 may include nubs 230 that project from the clamping portion 218 adjacent the slot 222. The nubs 230 may lock the tab 210 into the engaged position as the tab 210 is pivoted with respect to the slot 222. The nubs 230 may be aligned approximately normal to the slot 222, and the tab 210 may slightly deflect the nubs 230 as the tab 210 is rotated 90 degrees and locked into the engaged position. The tab 210 may be spring-loaded to enable it to clear the nubs 230. The nubs 230 may resist movement of the tab 210 from the engaged position to the disengaged position. The tab 210 holds the retaining surface 226 and clamping portion 218 from substantially moving with respect to each other.

To remove the fuel tank 14 from the frame 18, the tabs 210 are pivoted to the disengaged position to align the tabs 210 with the slots 222. The quick disconnect 162 (FIG. 2) is disengaged to disconnect the fuel tank 14 from the frame 18. The fuel tank 14 may then be removed from the frame 18.

FIG. 7 illustrates a variation of the embodiment shown in FIG. 6. In FIG. 7, the fuel tank 14 extends over the elongated rods 102 of the frame 18, and includes at least one recess 110 that provides clearance for the quick release fastener 54, which includes the tab 210. Once again, the tab 210 may pivot with respect to the frame 18 to engage or disengage the fuel tank 14. A clamping portion 310 is at least partially



disposed within the recess **110**, and the clamping portion **310** includes an elongated slot **314**. Similar to the previously described embodiment, the fuel tank **14** is initially positioned on the support portion **26** such that the slots **314** are aligned with the tabs **210**.

In the illustrated embodiment, the slot **314** is enclosed within the clamping portion **310**, and the slot **314** extends in substantially the same direction as the elongated rod **102**. Alternatively, the slots **414** could extend in any direction relative to the elongated rod **102**, as long as the tab **210** may be aligned with the slot **314**. Once the fuel tank **14** is positioned on the support portion **26** and the tab **210** extends through the slot **314**, the tab **210** may be pivoted 90 degrees from the disengaged position to the engaged position to clamp the clamping portion **310** and retain the fuel tank **14** to the frame **18**. FIG. 7 illustrates the tab **210** in the engaged position.

As described above, the clamping portion **310** may include nubs **318** that project from the clamping portion **310** adjacent the slot **314**. The nubs **318** may lock the tab **210** into an engaged position as the tab **210** is pivoted with respect to the slot **314**. Tab **210** may be spring-loaded to enable it to clear nubs **318**. The support portion **26** includes a retaining surface **322**, and the tab **210** holds the retaining surface **322** and clamping portion **310** from substantially moving with respect to each other. To remove the fuel tank **14**, the tabs **310** are pivoted to the disengage position and aligned with the slots **414**, and the quick disconnect **162** (FIG. 3) is disengaged. The fuel tank **14** may then be removed from the frame **18**.

FIG. 8 illustrates another alternate embodiment of the quick release fastener **54** that includes a C-shaped clamp **410** that retains the fuel tank **14** to the frame **18**. The fuel tank **14** includes a flange **414** that projects outwardly from the fuel tank **14** and extends along the sides **78**, **82** of the fuel tank **14**. The support portion **26** includes a lip **418** that is adjacent to the flange **414** when the fuel tank **14** is retained to the frame **18**. The flange **414** includes a clamping portion **422**, and the lip **418** includes a retaining surface **426**. The clamp **210** is engaged to clamp the flange **414** to the lip **418** and retain the fuel tank **14** to the frame **18**. The clamp **410** holds the retaining surface **426** and clamping portion **422** from substantially moving with respect to each other. The clamp **410** may be disengaged from the flange **414** to remove the fuel tank **14** from the frame **18**.

One skilled in the art will recognize that many variations of these illustrated embodiments of quick release fasteners **54** may be implemented to retain the removable fuel tank **10** to the frame **18**. For example, the quick release fasteners **54**, bolts **118** and tabs **210** (FIGS. 3-4 and 6-7) may be adapted to engage with an aperture in the flange **414** (FIG. 8). Additionally, the flange **414** (FIG. 8) may be combined with the support portion **26** having the elongated rod **112** (FIGS. 3-4 and 6-7) or the lip **418** (FIG. 8). Similarly, the lip **418** (FIG. 8) may also be combined with the recess **110** (FIGS. 3-4 and 6-7) and quick release fastener **54**. These and other similar embodiments of quick release fasteners **54** may be used to retain the fuel tank **14** to the frame **18**.

The foregoing detailed description describes only a few of the many forms that the present invention can take, and should therefore be taken as illustrative rather than limiting. It is only the following claims, including all equivalents that are intended to define the scope of the invention.

What is claimed is:

1. A generator comprising
  - a frame having a retaining surface;
  - an engine supported by the frame;
  - a fuel tank removably interconnected to the frame, the fuel tank comprising:

- a first face and a second face disposed opposite one another;
- a wall extending between the first face and second face;
- a clamping portion adjacent the wall; and

at least one quick release fastener that retains the fuel tank to the frame, and holds the retaining surface and the clamping portion from substantially moving with respect to each other.

2. The generator of claim 1, wherein the wall includes a first and second end wall disposed opposite one another, and a first and second side wall disposed opposite one another and adjacent the end walls, and the clamping portion is adjacent at least one of the first and second side walls.

3. The generator of claim 1, further comprising at least one recess disposed in the wall, wherein the clamping portion is at least partially disposed within the recess.

4. The generator of claim 1, further comprising:

- a handle that projects outwardly from the fuel tank.

5. The generator of claim 1, wherein the wall includes a ridge extending from the wall.

6. The generator of claim 1, wherein the at least one quick release fastener includes a hand-tightened bolt having a threaded end that threadedly engages the frame, and a head end having a handle thereon.

7. The generator of claim 6, wherein the bolt includes a disc-shaped flange that projects radially outward from the bolt adjacent the threaded end.

8. The generator of claim 7, wherein the flange contacts said clamping portion.

9. The generator of claim 1, further comprising at least one recess disposed in the wall, wherein the clamping portion is at least partially disposed within the recess, and the clamping portion includes an aperture.

10. The generator of claim 9, wherein the at least one quick release fastener includes a bolt that extends through the aperture to retain the fuel tank to the frame.

11. The generator of claim 1, wherein the at least one quick release fastener includes a clamp that applies pressure on the clamping portion to retain the fuel tank to the frame.

12. The generator of claim 11, wherein the clamp is substantially C-shaped.

13. The generator of claim 1, wherein the at least one quick release fastener includes a tab pivotally connected to the frame adjacent the retaining surface.

14. The generator of claim 13, wherein the clamping portion has an elongated slot that engages the tab.

15. The generator of claim 14, wherein the tab is pivotable between a disengaged position in which the tab is aligned with the slot, and an engaged position in which the tab is rotated approximately 90 degrees with respect to the slot to prevent the tab from sliding through the slot, and wherein the fuel tank is retained to the frame when the tab is in the engaged position.

16. The generator of claim 1, wherein the first face includes a fuel opening, and a removable fuel cap that encloses the fuel opening.

17. The generator of claim 16, wherein the fuel cap is vented.

18. The generator of claim 1, further comprising a fuel line that extends from the fuel tank to the engine to provide fuel for the engine, and includes a shut-off valve interconnected to selectively prevent fuel flow through the fuel line.

19. The generator of claim 18, wherein the fuel line includes a quick disconnect that permits the fuel tank to be readily connected and disconnected from the generator.